

REMARKS

Claims 1-8 and 11-18 are currently pending in the above-identified patent application. Claims 1 and 11 have been amended. In the subject Office Action, made final, the Examiner rejected claims 1-8 and 11-18 under 35 U.S.C. 103(a) as being unpatentable over Carteau (US Patent No. 5,506,750).

Regarding claim 1, the Examiner stated that the reference discloses a storage system SP with multiple disk drives comprising an enclosure, an interface board FP having a first backplane interface connector CX₁ and a second backplane interface connector CX₂, said interface board being mounted in said enclosure, said interface board being substantially planar and defining an interface board plane (which extends vertically), a first CDA₁ and second CDA₂ backplane each having a plurality of disk drive interface connectors C₁₀₁-C₁₁₀ and a backplane interface mating connector (CAR₁, CAR₂ respectively) capable of mating with one of said first and second backplane interface connectors, said plurality of disk drive interface connectors being arranged in a plurality of rows and a plurality of columns, said first and second backplane being substantially planar and defining a first and second backplane plane (each of which extends horizontally), a first set of disk drives 101-110 electrically connected to said first backplane through said plurality of disk drive interface connectors, each of said first set of disk drives having a longest edge defining a long axis, said long axis being oriented parallel to said first backplane plane, a second set of disk drives (another set 101-110) electrically connected to said second backplane through said plurality of disk drive interface connectors, each of said second set of disk drives having a longest edge defining a long axis, said long axis being oriented parallel to said second backplane plane, a first power supply AL₁ connected to said first backplane, a second power supply AL₂ connected to said second backplane, a first guiding mechanism G₁ mounted in said enclosure, said first guiding mechanism defining a first axis of insertion, said first axis of insertion being substantially perpendicular to said interface board plane, said first guiding mechanism being arranged to guide said first backplane into said enclosure such that said first backplane electrically connects to said first backplane interface connector such that said first backplane plane is substantially perpendicular to said

interface plane, said first backplane and said first set of disk drives being removable from said enclosure as a first single unit and a second guiding mechanism G_2 mounted in said enclosure, said second guiding mechanism defining a second axis of insertion, said second axis of insertion being substantially perpendicular to said interface board plane, said second guiding mechanism being arranged to guide said second backplane into said enclosure such that said second backplane electrically connects to said second backplane interface connector such that said second backplane plane is substantially perpendicular to said interface plane, said second backplane and said second set of disk drives being removable from said enclosure as a second single unit. The Examiner continued by stating that the reference does not teach that the first and second set of disk drives wherein each of the disk drives having a longest edge defining long axis, said long axis being oriented perpendicular to said first and second backplane plane, respectively; instead the long axis is parallel to the backplane. The Examiner concluded that it would have been obvious that the disk drives may be positioned such that the long axis is perpendicular to the backplane to provide better cooling the storage system.

Regarding method claims 11-18, the Examiner asserted that one would necessarily perform the recited method steps in constructing the storage system rejected above.

Applicants respectfully disagree with the Examiner concerning the rejection of claims 1-8 and 11-18 for the reasons to be set forth hereinbelow. Reexamination and reconsideration are respectfully requested.

The Examiner objected to claim 5 as being dependent upon a rejected base claim, but stated that claim 5 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

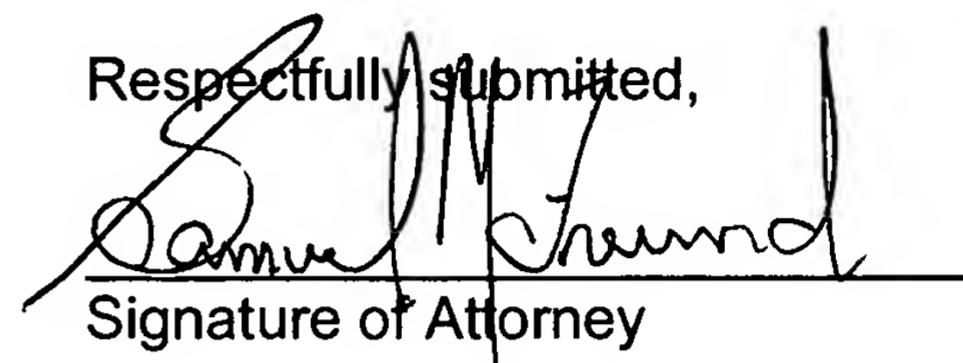
Turning now to the rejection of claims 1-8 and 11-18 under 35 U.S.C. 103(a) as being unpatentable over Carteau, concerning applicants' Response to Arguments filed on June 24, 2004, the Examiner stated that applicants' amended claims 1 and 11 recite a first power supply that is connected to the first backplane and a second power supply that is connected to the second backplane, contrary to the teachings of Carteau that show two identical power supplies, wherein one power supply is connected to all of the plates bearing disk memories and that this power supply is backed up by a second power supply or battery in the event that the first power supply fails and therefore requires electronics to sense a power failure and also requires a switch connected to the backup power. While this may be true, the Examiner stated that the present claims recite "a first power supply connected to said first backplane" and "a second power supply connected to said second backplane" which is still met by the configuration shown in Carteau, since the first power supply is electrically connected to said first backplane and also said second backplane and the second (backup) power supply is electrically connected to the first backplane and also the second back plane through the switching means. Applicants wish to thank the Examiner for having identified the reasons that applicants' Amendment A failed to place the subject claims in condition for allowance, and have amended claims 1 and 11 in response thereto. No new matter has been added by these changes, since support therefor may be found in Fig. 2 and lines 27-28 of page 7 of the subject Specification, as originally filed.

Applicants believe that amended claims 1 and 11 now clearly overcome the rejection thereof under 35 U.S.C. 103(a) over Carteau, and respectfully request that the amendments be entered by the Examiner.

For these reasons, applicants believe that claims 1-8 and 11-18, as amended by this Amendment Under Rule 1.116, are now in condition for allowance or appeal, the former action by the Examiner at an early date being earnestly solicited. Reexamination and reconsideration are respectfully requested.

Date: November 22, 2004

Reg. No. 30,459
Phone: (970) 377-6363

Respectfully submitted,


Signature of Attorney

Samuel M. Freund
Cochran Freund & Young LLC
3555 Stanford Road, Suite 230
Fort Collins, Colorado 80525